

ABSTRACT

The invention provides a low Ni and high N austenitic-ferritic stainless steel. The invention provides an austenitic-ferritic stainless steel having high formability and punch stretchability, crevice corrosion resistance, corrosion resistance at welded part, or excellent intergranular corrosion resistance, from a stainless steel structured by mainly austenite phase and ferrite phase, and consisting essentially of 0.2% or less C, 4% or less Si, 12% or less Mn, 0.1% or less P, 0.03% or less S, 15 to 35% Cr, 3% or less Ni, and 0.05 to 0.6% N, by mass, by adjusting the percentage of the austenite phase in a range from 10 to 85%, by volume. Furthermore, the invention provides an austenitic-ferritic stainless steel having higher formability by adjusting the amount of (C + N) in the austenite phase to a range from 0.16 to 2% by mass.